REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on November 30, 1999, and the references cited therewith.

Claims 60, 61, and 65 have been amended per the Office Action suggestion to clarify the subject matter of the claims. As such, the objections are believed to be overcome. Claims 36-39 and 59-69 remain pending in this application.

With respect to the request of paragraph 3 of the Office Action, Applicant has already updated the information, and will continue to update throughout prosecution if the status of any of the applications or patents changes.

With respect to the objections to claims 62 and 64, Applicant submits that the specification contains clear support for the recitations of the claims. For example, the specification at page 31, lines 6-16, indicates a method in which the external address only data path is selected before the choice of whether the operation is a read operation or a write operation is made. This is a different order from that set forth in the claims, and is clearly supported in the specification.

Pages 31-32 and 35, among others, describe the choices of read or write operations for the memory. Clearly, there is shown a method for determining a data transfer direction, that is a direction into the array (write) or out of the array (read). As such, the objection to claim 68 is unfounded.

Substantial differences clearly exist in the scope of the claims. Applicant submits that each independent claim has its own different subject matter or scope. Claims 36-39 are specifically directed to an asynchronously-accessible dynamic random access memory. The remaining claims are not so limited. Further, each and every limitation must be considered when determining differences in the claims. Each difference creates different subject matter and scope which significantly varies the scope and subject matter of the claims. Specifically, the claims recite different subject matter. For example, claim 59 includes executing a read or write operation. Such execution is not present in claims 36-39. As such, the scope of claim 59 is substantially different from claims 36-39. Claims 63 and 68 include selecting external only data paths or initial buffered paths for read and write operations in both burst and pipelined modes of operations. Such a limitation is not present in any of claims 36-39. Claims 65, 66, and 67

include cycling a second enabling signal not present in claims 36-39. Claim 69 is an apparatus claim of clearly different subject matter than claims 36-39. The objections to the subject matter of claims 59-69 is believed overcome.

§103 Rejection of the Claims

Claims 36-39 and 59-69 were rejected under 35 USC § 103(a) as being unpatentable over Manning (U.S. Patent No. 5,610,864) in view of Ryan (U.S. Patent No. 5,966,724). Applicant traverses the rejections, and submits that the rejection fails to satisfy the prima facie case of obviousness, and as such, the rejections are improper and should be withdrawn.

Applicant continues to dispute that Manning shows a pipelined mode of operation. Ryan discusses only a synchronous burst access memory device, as is clear from a reading of the Ryan disclosure. Within the Ryan burst memory device, certain addresses can be received in a pipeliné method. However, Ryan does not switch between a burst and a pipelined mode of operation. Instead, within a burst operation, pipelined addresses may be received. In fact, Applicant can find no reference in col. 4, ll. 21-26, or for that matter in the entire Ryan specification, of any switching between burst and pipelined modes of operation. Instead, as has been mentioned, the memory device of Ryan is a synchronous burst access memory device.

Applicant submits that there is no motivation to combine Manning and Ryan. Switching between burst and pipelined modes of operation is not suggested in either Ryan, Manning, or any combination thereof. As has been discussed, no actual switching between burst and pipelines modes of operation is discussed in Ryan. Instead, within a burst mode, pipelined addresses may be received. This is fundamentally different from switching between burst and pipelined modes of operation. As no mention has been made in either reference of switching between burst and pipelined modes of operation, such a combination does not include the switching. Further, combination of the references does not result in both burst and pipelined modes of operation. Instead, as has been mentioned before in earlier arguments, which are incorporated herein again, it is only hindsight gained from Applicant's disclosure which suggests having both burst and pipelined modes of operation in a memory, and switching therebetween.

Manning and Ryan are further not properly combinable as Manning is directed to asynchronous memories and Ryan to synchronous memories. It is a specific unaddressed problem of asynchronous DRAMs to switch between burst and pipelined modes of operation since it was not previously needed. See the background of the invention, page 5, ll. 16-22.

Applicant can find no mention in col. 4, ll. 21-26 of Ryan of the detailed selection in claim 63 of selecting an external address only data path and an initial buffered external address path.

Further, Applicant can find no support for the specific maintenance of the signals of enabling and the like in Ryan. No specific mention of the signals involved is shown. Such a blanket recitation of elements without pointing out where the elements occur in the specification does not give Applicant the ability to properly understand the rejection. As such, Applicant asks that the specific elements of the claims be pointed out in Ryan, including specifically the location in the Ryan reference of such elements.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner of Patents, Washington, D.C. 20231 on **February 29, 2000**.

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